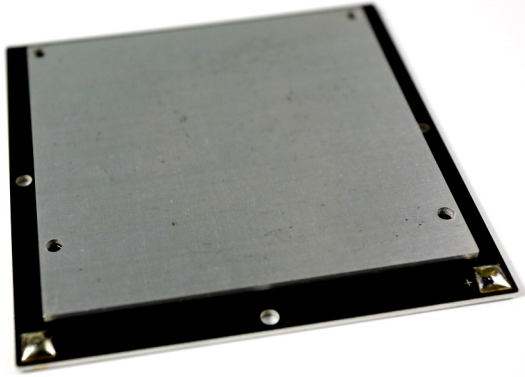


# Technical Data Sheet for TEG8080 - G10SP

## Metal Based Thermoelectric Generator



### NOMINAL PERFORMANCE & FEATURES

- Working Temperature : -20 °C~230 °C
- AC Resistance : 4.2 Ω ± 10% (at 25°C)
- Working Humidity : 10~70%
- RoHS EU Compliant
- High Strength for Rugged Environment
- Custom Size and Shape

### INSTALLATION

Recommended mounting methods: Clamp or screw with uniform pressure to a flat surface with thermal interface material. Recommended 1MPa (145 psi) with thermal grease or flexible graphite pads.

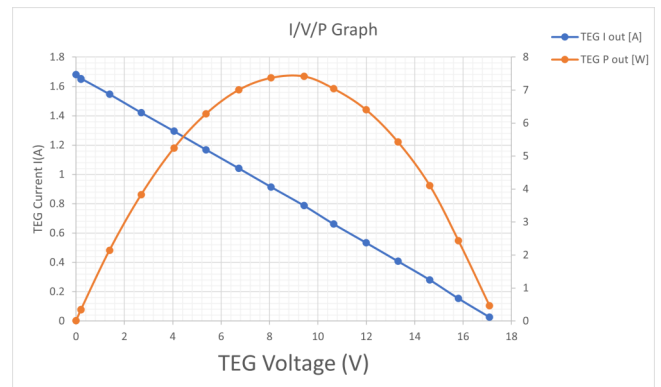
### OPERATION CAUTIONS

For maximum reliability, continuous operation below 200°C (cold side and hot side) is recommended. Intermittent operation up to 230°C on the hot side of TEG is permissible.

### POWER GENERATION PERFORMANCE CURVE

Laboratory Test for Delta 200°C

- Open Circuit Voltage, VOC: 17V
- Closed Circuit Current: 1.68A
- Optimum Power: 7.4W



| Delta T = 200 |               |               | Cold side flow rate = 1.5L/hr |                       |            |             |         |
|---------------|---------------|---------------|-------------------------------|-----------------------|------------|-------------|---------|
| TEG V out [V] | TEG I out [A] | R load [ohms] | TEG P out [W]                 | Applied Pressure [kg] | T hot [°C] | T cold [°C] | Delta T |
| 17.0879       | 0.027215      | 627.88766     | 0.46504549                    | 449.40898             | 223.948    | 24.61       | 199.338 |
| 9.42132       | 0.787324      | 11.966255     | 7.41763135                    | 450.81902             | 225.967    | 25.582      | 200.385 |
| 0.003787      | 1.6805        | 0.0022535     | 0.00636405                    | 451.20417             | 226.322    | 26.733      | 199.589 |

**MECHANICAL CHARACTERISTICS**

All units are in millimeters. For customer support or general questions, please contact local office or visit our website at [www.glxpcb.com](http://www.glxpcb.com)

